

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims

Claim 1 (Currently amended): [[An]] A soluble isolated polypeptide comprising a suppressor of cytokine signaling (SOCS) sequence and a membrane translocating sequence at either a 5' or 3' end of the SOCS sequence.

Claim 2 (Currently amended): The soluble isolated polypeptide of claim 1, wherein the isolated polypeptide is a human polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3).

Claim 3 (Currently amended): An isolated nucleic acid encoding a soluble polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence at either a 5' or 3' end of the SOCS sequence.

Claim 4 (Currently amended): The isolated nucleic acid of claim 3, wherein the isolated nucleic acid encodes a soluble polypeptide comprising a human suppressor of cytokine signaling (SOCS) amino acid sequence and the membrane translocating sequence set forth as SEQ ID NO: 2 at either 5' or 3' of the SOCS sequence.

Claim 5 (Previously presented): The isolated nucleic acid of claim 4, wherein the isolated nucleic acid comprises a human SOCS3 nucleotide sequence set forth in SEQ ID NO: 11.

Claim 6 (Currently amended): A vector comprising an isolated mammalian nucleic acid encoding a soluble polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence at either an amino or carboxy end of the SOCS sequence.

Claim 7 (Currently amended): An isolated cell comprising a vector, wherein the vector comprises an isolated human nucleic acid encoding a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence set forth as SEQ ID NO: 2, producing a recombinant soluble cell-penetrating form of SOCS1 and of SOCS3.

Claim 8 (Currently amended): The soluble isolated polypeptide of claim 1, wherein the membrane translocating sequence comprises SEQ ID NO: 2.

Claim 9 (Currently amended): The soluble isolated polypeptide of claim 1, wherein the polypeptide further comprises a purification sequence.

Claim 10 (Currently amended): The soluble isolated polypeptide of claim 9, wherein the purification sequence is a polyhistidine tag.

Claim 11 (Currently amended): A pharmaceutical composition comprising the soluble isolated polypeptide of claim 1, and a pharmaceutically acceptable carrier, diluent or excipient.

Claim 12 (Currently amended): A method of treating an inflammatory disease in a subject comprising: administering a soluble isolated polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence at either an amino or carboxy terminal end of the SOCS sequence to a subject.

Claim 13 (Previously presented): The method of claim 12, wherein the subject is a subject with an inflammatory disease or at risk for presenting with an inflammatory disease wherein the inflammation inducing substance is bacteria.

Claim 14 (Previously presented): The method of claim 13, wherein the severity of the inflammatory disease of the subject is reduced.

Claim 15 (Withdrawn-previously presented): The method of claim 14, wherein the severity of an inflammatory process in obesity, insulin resistance, type 2 diabetes, and metabolic syndrome is reduced.

Claim 16 (Original): The method of claim 13, wherein the inflammation is associated with an infection.

Claim 17 (Original): The method of claim 16, wherein the infection is a viral infection.

Claim 18 (Original): The method of claim 16, wherein the infection is a bacterial infection.

Claim 19 (Previously presented): The method of claim 18, wherein the bacterial infection is a *Staphylococcus aureus* enterotoxin B infection.

Claim 20 (Canceled).

Claim 21 (Currently amended): The method of claim 12, wherein the soluble isolated polypeptide is administered to the subject prior to or after surgery.

Claim 22 (Currently amended): The method of claim 12, wherein the soluble isolated polypeptide is administered to the subject prior to or after contact with an infectious biological weapon.

Claim 23 (Currently amended): A method of treating an inflammatory disease in a patient comprising administering [[an]] a soluble isolated polypeptide comprising a cell penetrating suppressor of cytokine signaling 1 or 3 (CP-SOCS1; CP-SOCS3) polypeptide to a patient.

Claim 24 (Previously presented): The method of claim 23, wherein the inflammation inducing substance is bacteria.

Claim 25 (Previously presented): The method of claim 23, wherein the severity of the patient with an inflammatory disease is reduced.

Claim 26 (Withdrawn- previously presented): The method of claim 25, wherein the severity of inflammatory process in obesity, insulin resistance, type 2 diabetes, and metabolic syndrome is reduced.

Claim 27 (Currently amended): A method of inhibiting a cytokine-induced response in a cell, comprising administering to the cell a complex comprising the soluble isolated polypeptide of claim 1.

Claim 28 (Currently amended): A method of inhibiting a cytokine-induced response in a subject, comprising administering to the subject a complex comprising the soluble isolated polypeptide of claim 1.

Claim 29 (Withdrawn- currently amended): A method comprising administering to a subject soluble isolated polypeptide comprising a mutated SOCS sequence, wherein the mutated SOCS sequence lacks or has a reduced suppressor of cytokine signaling function.

Claim 30 (Withdrawn- currently amended): The method of claim 29, wherein the soluble isolated polypeptide further comprises a membrane translocating sequence.

Claim 31 (Withdrawn- currently amended): The method of claim 30, wherein the soluble isolated polypeptide further comprises a purification sequence.